LIST OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

CLAIMS

1. (currently amended) A chamber for transitioning a semiconductor substrate between modules operating at different pressures, the chamber comprising:

a base defining an outlet, the outlet permitting removal of an atmosphere within the chamber to create a vacuum;

a stationary top and bottom substrate support configured to each support a single semiconductor substrate within the chamber, the top substrate support configured to receive a first substrate from one of the modules, the bottom substrate support configured to receive a second substrate from a different one of the modules;

a top having an inlet, the inlet configured to allow for the introduction of a gas into the chamber to displace moisture in a region defined above the top substrate support; and

sidewalls extending from the base to the top, the sidewalls including access ports for entry and exit of a semiconductor substrate.

2. (previously presented) The chamber of claim 1, further including:

a diffuser in communication with the inlet, the diffuser located over the region defined above the top substrate support.

3. (original) The chamber of claim 1, wherein the outlet of the chamber is in communication with a vacuum pump used to create a vacuum in the chamber.

4. (original) The chamber of claim 1, wherein the gas introduced into the chamber is an inert gas.

5. (previously presented) The chamber of claim 2, wherein a distance between a bottom surface of the diffuser and a top surface of a semiconductor substrate resting on the top substrate support is between about 3 millimeters and about 3 centimeters.

6. (currently amended) A system for processing a semiconductor substrate, the system comprising:

a first transfer module configured to operate at a first pressure;

a second transfer module configured to operate at a second pressure;

a pressure varying interface located between the first and the second transfer modules, the pressure varying interface capable of transitioning between the first and the second pressures, the pressure varying interface having a first and second substrate support, the first and second substrate supports being stationary, a top vent port and a bottom vacuum port, the top vent port configured to introduce a fluid into the pressure varying interface, wherein the introduction of the fluid displaces moisture in a region defined above the substrate supports, the first and second substrate supports configured to support substrates having different processing states, the substrates being received from corresponding transfer modules.

7. (original) The system of claim 6 wherein the pressure varying interface is a load lock.

8. (previously presented) The system of claim 7, wherein the top vent port is configured to deliver the fluid to a diffuser located above the first substrate support.

9. (original) The system of claim 6 wherein the fluid introduced into the pressure varying interface is an inert gas.

10. (original) The system of claim 6, wherein the pressure varying interface includes a first access port to provide access to the first transfer module and a second access port to provide access to the second transfer module, the first pressure being a positive pressure, the second pressure being a vacuum.

11. (original) The system of claim 10, wherein the fluid is introduced to the pressure varying interface through the top vent port when the first access port is open.

12. (new) The chamber of claim 1, wherein the top substrate support handles unprocessed substrates and the bottom substrate support handles processed substrates.

13. (new) The system of claim 6, wherein the first substrate support supports unprocessed substrates and the second substrate support supports processed substrates.